



**SOUTH BAY  
ENVIRONMENTAL SERVICES CENTER**

**South Bay Cities Council of Governments**

**August 2012 News and Events**

**Southern California Edison (SCE) Big Creek Workshop  
Our Environmental Services Analyst (ESA), Joline Munoz Shares Her Experience  
and Some SCE History**

Big Creek is SCE's 1000 MW Hydroelectric Facility in the High Sierras. It provides 220,000 volts of renewable electricity to Southern California.

On the way to Big Creek, the Workshop included a brief tour of the Energy Education Center (EEC) in Tulare, similar to the center that is located in Irwindale. This facility gives educational workshops mainly to commercial customers and has a tool lending library that is available to all customers. If a customer in the LA County Service Area is interested in participating, they can arrange to have the tool shipped to the Irwindale Center or if they aren't located close enough to the Irwindale Center, the item can be shipped directly to their property.

After visiting the EEC, the rest of the workshop was held at Big Creek. The facilities that we toured and got a chance to see included Powerhouses 1 and 8 and the Eastwood Power Station along with Dams 4 & 6. Powerhouse 1 was the first to go into operation and started producing power in 1913. The Eastwood Power Station is located 1000 feet below the surface and has a  $\frac{3}{4}$  mile granite tunnel for truck and crew access. There is also an access elevator and stairs that go straight up to the surface. This power station was named after the Engineer who thought up and designed the project back in the early 1900s. In total, Big Creek has 9 Powerhouses, 6 reservoirs and many generators. During the tours, we walked on the two dams and got to see the turbines in action. The massive size of the facilities and learning that all of the major equipment is still original, just upgraded and maintained over the years is incredible.

The California Public Utilities Commission (CPUC) Renewables Portfolio Standards (RPS) requirements state that each electricity provider must meet 33% of its demand with renewable power sources by 2020. Since Big Creek is an existing facility built long ago, it cannot be used to fulfill this renewable source procurement requirement. One of the major projects that SCE is currently working on is the Tehachapi Renewable Transmission Project (TRTP), which includes 173 miles of new transmission line that will connect wind farms in Kern County to Southern California. This project is currently in the construction phase and parts of the project are on hold due to the Migratory Bird

Treaty Act of 1918 and dissent from the public in Chino Hills. In Chino Hills, a five-mile section of existing line is being upgraded from 220 KV to 500 KV. This has required the installation of much taller transmission towers resulting in loud public outcry. The Migratory Bird Treaty Act has many interpretations and was signed by the U.S., Japan, Canada, Mexico and Russia to protect all migratory birds. It requires that any disturbance foreseen or during construction be evaluated and mitigated to protect migratory birds. Only a few birds are not included in the list of migratory birds such as the pigeon. [Click here](#) for a copy of the press-release project update from Early 2011 on the TRTP.

#### Key Points:

- SCE has been in the clean energy business for a long time. Big Creek first starting running in 1913.
- SCE is working towards meeting the goals of new renewable energy generation and transmission to meet Southern California's needs and the requirements set forth by the CPUC.
- There are many environmental issues and public concerns surrounding a large renewable project such as the TRTP. These have added to the difficulty of completing such a large project.
- It is important to educate the public on the big picture and how they can help SCE continue to provide reliable electricity for Southern California customers.
- Some of the many programs SCE offers include:
  - Energy Education Centers-Tulare & Irwindale
  - Solar Leadership-Customer owned, Utility Owned, and Third-Party Owned
  - Commercial
  - Energy Management Solutions
    - Demand Response
    - Express Solutions
    - Custom Solutions
    - Demand Response
  - Residential
  - Rebate Incentives
  - Summer Discount Program-Residential Demand Response

Especially with San Onofre Nuclear Generating Station (SONGS) (capacity of 2200 MW) offline, SCE wants to continue to promote and expand their programs to continue to provide reliable electricity in the future.